Dairy Sci. Technol. 88 (2008) 683–694

# Online Material

**Table II (electronic-only material).** Mean values and standard deviations ($n$ = 10) for fatty acid composition (g·100 g$^{-1}$ FA) in Azeitão (A), Évora (E) and Nisa (N) milks and cheeses. Minimum ripening time (1) and after 3 months of extended ripening (2).

| | Milk A | Cheese A (1) | Cheese A (2) | Milk E | Cheese E (1) | Cheese E (2) | Milk N | Cheese N (1) | Cheese N (2) |
|---|---|---|---|---|---|---|---|---|---|
| C4 | 4.00 ± 1.020 | 4.16 ± 0.925 | 7.22 ± 1.881 | 4.04 ± 0.461 | 6.39 ± 0.779 | 5.28 ± 1.297 | 4.29 ± 1.096 | 4.42 ± 0.984 | 4.38 ± 0.571 |
| C6 | 3.08 ± 0.494 | 3.29 ± 0.498 | 4.71 ± 0.978 | 3.36 ± 0.301 | 4.456 ± 0.649 | 3.93 ± 0.776 | 3.36 ± 0.602 | 3.10 ± 0.559 | 3.11 ± 0.348 |
| C7 | 0.03 ± 0.006 | 0.04 ± 0.008 | 0.04 ± 0.007 | 0.04 ± 0.007 | 0.05 ± 0.009 | 0.05 ± 0.008 | 0.03 ± 0.008 | 0.03 ± 0.005 | 0.03 ± 0.003 |
| C8 | 2.65 ± 0.350 | 2.98 ± 0.415 | 3.47 ±0.609 | 2.78 ± 0.246 | 3.59 ± 0.591 | 3.16 ± 0.506 | 2.76 ± 0.366 | 2.58 ± 0.369 | 2.56 ± 0.221 |
| C9 | 0.07 ± 0.009 | 0.08 ± 0.011 | 0.07 ± 0.010 | 0.08 ± 0.015 | 0.08 ± 0.022 | 0.08 ± 0.012 | 0.06 ± 0.011 | 0.07 ± 0.058 | 0.06 ± 0.005 |
| C10 | 6.88 ± 0.839 | 7.35 ± 0.606 | 8.27 ± 1.193 | 7.31 ± 0.577 | 8.57 ± 1.457 | 7.97 ± 0.872 | 7.11 ± 0.751 | 6.69 ± 0.786 | 6.50 ± 0.355 |
| C10:1 | 0.23 ± 0.036 | 0.22 ± 0.029 | 0.25 ± 0.035 | 0.23 ± 0.025 | 0.28 ± 0.053 | 0.28 ± 0.034 | 0.26 ± 0.030 | 0.22 ± 0.024 | 0.22 ± 0.019 |
| C11 | 0.12 ± 0.050 | 0.29 ± 0.163 | 0.10 ± 0.031 | 0.15 ± 0.090 | 0.16 ± 0.114 | 0.25 ± 0.175 | 0.10 ± 0.044 | 0.21 ± 0.105 | 0.16 ± 0.077 |
| C12 | 3.93 ± 0.286$^{a}$ | 3.98 ± 0.289$^{a}_{x}$ | 4.08 ± 0.334$^{a}_{\mathbf{x}}$ | 4.16 ± 0.299$^{\mathbf{a}}$ | 4.44 ± 0.598$^{\mathbf{a}}_{x}$ | 4.32 ± 0.286$^{\mathbf{a}}_{\mathbf{x}}$ | 4.09 ± 0.354$^{a}$ | 3.93 ± 0.453$^{a}_{x}$ | 3.78 ± 0.156$^{a}_{\mathbf{x,y}}$ |
| C12:1 | 0.04 ± 0.008 | 0.04 ± 0.010 | 0.03 ± 0.009 | 0.04 ± 0.008 | 0.04 ± 0.014 | 0.04 ± 0.012 | 0.05 ± 0.007 | 0.04 ± 0.011 | 0.04 ± 0.005 |
| iC13 | 0.10 ± 0.009 | 0.10 ± 0.020 | 0.10 ± 0.010 | 0.10 ± 0.011 | 0.10 ± 0.018 | 0.10 ± 0.013 | 0.09 ± 0.031 | 0.09 ± 0.016 | 0.09 ± 0.009 |
| aiC13 | 0.04 ± 0.037 | 0.01 ± 0.002 | 0.01 ± 0.005 | 0.01 ± 0.002 | 0.01 ± 0.004 | 0.01 ± 0.002 | 0.02 ± 0.003 | 0.01 ± 0.003 | 0.01 ± 0.002 |
| C13 | 0.09 ± 0.007 | 0.08 ± 0.008 | 0.08 ± 0.007 | 0.09 ± 0.008 | 0.09 ± 0.015 | 0.09 ± 0.008 | 0.08 ± 0.028 | 0.08 ± 0.014 | 0.07 ± 0.003 |
| iC14 | 0.11 ± 0.010 | 0.10 ± 0.015 | 0.09 ± 0.010 | 0.09 ± 0.009 | 0.09 ± 0.011 | 0.09 ± 0.010 | 0.09 ± 0.034 | 0.10 ± 0.015 | 0.10 ± 0.004 |
| C14 | 10.48 ± 0.532$^{a}$ | 10.6 ± 0.361$^{a}_{x}$ | 10.5 ± 0.436$^{a}_{\mathbf{x}}$ | 10.32 ± 0.332$^{\mathbf{a}}$ | 10.3 ± 0.684$^{\mathbf{a}}_{x}$ | 10.3 ± 0.446$^{\mathbf{a}}_{\mathbf{x}}$ | 10.49 ± 0.529$^{a}$ | 10.4 ± 0.953$^{a}_{x}$ | 9.89 ± 0.211$^{a}_{\mathbf{x,y}}$ |
| C14:1 | 0.14 ± 0.020 | 0.14 ± 0.028 | 0.13 ± 0.015 | 0.16 ± 0.020 | 0.13 ± 0.060 | 0.17 ± 0.031 | 0.18 ± 0.033 | 0.12 ± 0.078 | 0.15 ± 0.018 |
| iC15 | 0.35 ± 0.022 | 0.32 ± 0.031 | 0.29 ± 0.035 | 0.28 ± 0.035 | 0.23 ± 0.064 | 0.27 ± 0.024 | 0.31 ± 0.016 | 0.27 ± 0.075 | 0.31 ± 0.022 |
| aiC15 | 0.43 ± 0.029 | 0.42 ± 0.023 | 0.40 ± 0.023 | 0.39 ± 0.046 | 0.39 ± 0.050 | 0.41 ± 0.031 | 0.37 ± 0.025 | 0.038 ± 0.037 | 0.37 ± 0.013 |
| C15 | 0.82 ± 0.084 | 0.86 ± 0.046 | 0.82 ± 0.048 | 0.77 ± 0.052 | 0.75 ± 0.070 | 0.78 ± 0.050 | 0.79 ± 0.033 | 0.80 ± 0.108 | 0.76 ± 0.014 |
| C15:1 | 0.09 ± 0.051 | 0.12 ± 0.012 | 0.10 ± 0.06 | 0.07 ± 0.057 | 0.09 ± 0.011 | 0.03 ± 0.066 | 0.17 ± 0.088 | 0.11 ± 0.012 | 0.12 ± 0.044 |
| iC16 | 0.27 ± 0.027 | 0.32 ± 0.123 | 0.24 ± 0.038 | 0.29 ± 0.067 | 0.27 ± 0.117 | 0.25 ± 0.102 | 0.19 ± 0.134 | 0.42 ± 0.133 | 0.32 ± 0.085 |
| C16 | 24.75 ± 0.377$^{a}$ | 24.8 ± 0.702$^{a}_{x}$ | 23.9 ± 0.931$^{b}_{\mathbf{x}}$ | 23.89 ± 0.761$^{\mathbf{a}}$ | 22.9 ± 0.936$^{\mathbf{a}}_{y}$ | 23.2 ± 0.829$^{\mathbf{a,b}}_{\mathbf{x}}$ | 23.68 ± 0.528$^{a}$ | 23.6 ± 0.714$^{a}_{y}$ | 23.2 ± 0.593$^{a}_{\mathbf{x}}$ |

**Table II (electronic-only material).** Continued.

| | Milk A | Cheese A (1) | Cheese A (2) | Milk E | Cheese E (1) | Cheese E (2) | Milk N | Cheese N (1) | Cheese N (2) |
|---|---|---|---|---|---|---|---|---|---|
| C16:1 *t*9 | 0.21 ± 0.039 | 0.25 ± 0.027 | 0.24 ± 0.026 | 0.27 ± 0.020 | 0.23 ± 0.061 | 0.27 ± 0.023 | 0.21 ± 0.077 | 0.26 ± 0.017 | 0.27 ± 0.019 |
| C16:1 *c*7 | 0.38 ± 0.057 | 0.43 ± 0.022 | 0.42 ± 0.013 | 0.43 ± 0.023 | 0.38 ± 0.055 | 0.41 ± 0.046 | 0.37 ± 0.130 | 0.44 ± 0.021 | 0.44 ± 0.010 |
| C16:1 *c*9 | 0.85 ± 0.078 | 0.82 ± 0.033 | 0.77 ± 0.048 | 0.86 ± 0.050 | 0.82 ± 0.083 | 0.85 ± 0.064 | 0.81 ± 0.288 | 0.87 ± 0.070 | 0.85 ± 0.024 |
| iC17 | 0.34 ± 0.024 | 0.37 ± 0.021 | 0.34 ± 0.057 | 0.33 ± 0.020 | 0.30 ± 0.040 | 0.33 ± 0.021 | 0.28 ± 0.100 | 0.34 ± 0.015 | 0.34 ± 0.009 |
| aiC17 | 0.37 ± 0.026 | 0.36 ± 0.014 | 0.35 ± 0.033 | 0.37 ± 0.023 | 0.35 ± 0.044 | 0.37 ± 0.024 | 0.33 ± 0.012 | 0.36 ± 0.042 | 0.34 ± 0.006 |
| C17 | 0.50 ± 0.056 | 0.53 ± 0.056 | 0.48 ± 0.048 | 0.49 ± 0.039 | 0.42 ± 0.055 | 0.46 ± 0.040 | 0.49 ± 0.083 | 0.49 ± 0.062 | 0.46 ± 0.020 |
| C17:1 | 0.24 ± 0.018 | 0.23 ± 0.015 | 0.21 ± 0.021 | 0.22 ± 0.018 | 0.19 ± 0.036 | 0.22 ± 0.023 | 0.21 ± 0.022 | 0.22 ± 0.034 | 0,21 ± 0.013 |
| C18 | $10.48 \pm 1.117^{a}$ | $9.59 \pm 0.599^{b}{}_{x}$ | $8.04 \pm 2.829^{c}{}_{\mathbf{x}}$ | $9.75 \pm 0.732^{\mathbf{a}}$ | $8.94 \pm 0.831^{\mathbf{b}}{}_{y}$ | $9.22 \pm 0.582^{\mathbf{a,b}}{}_{\mathbf{y}}$ | $10.35 \pm 0.654^{a}$ | $10.5 \pm 0.957^{a}{}_{z}$ | $10.7 \pm 0.361^{a}{}_{\mathbf{z}}$ |
| C18:1*t*9[1] | $2.74 \pm 0.354^{a}$ | $3.19 \pm 0.320^{b}{}_{x}$ | $3.06 \pm 0.218^{a,b}{}_{\mathbf{x}}$ | $3.58 \pm 0.694^{\mathbf{a}}$ | $3.33 \pm 0.592^{\mathbf{a}}{}_{x}$ | $3.32 \pm 0.480^{\mathbf{a}}{}_{\mathbf{x}}$ | $3.19 \pm 0.565^{a}$ | $3.62 \pm 0.495^{a}{}_{x}$ | $3.50 \pm 0.538^{a}{}_{\mathbf{x}}$ |
| C18:1*c*9 | $18.69 \pm 2.327^{a}$ | $16.7 \pm 0.790^{a,b}{}_{x}$ | $15.4 \pm 1.684^{b}{}_{\mathbf{x}}$ | $18.17 \pm 0.788^{\mathbf{a}}$ | $16.5 \pm 1.93^{\mathbf{a}}{}_{x}$ | $17.1 \pm 0.926^{\mathbf{b,a}}{}_{\mathbf{y}}$ | $18.81 \pm 1.211^{a}$ | $18.6 \pm 2.005^{a}{}_{y}$ | $19.7 \pm 0.598^{a}{}_{\mathbf{z}}$ |
| C18:1*c*11 | 0.26 ± 0.080 | 0.23 ± 0.037 | 0.23 ± 0.025 | 0.30 ± 0.036 | 0.27 ± 0.036 | 0.26 ± 0.098 | 0.31 ± 0.021 | 0.31 ± 0.052 | 0.32 ± 0.024 |
| C18:2*t*9,*t*12 | 0.44 ± 0.103 | 0.58 ± 0.099 | 0.55 ± 0.048 | 0.53 ± 0.099 | 0.47 ± 0.092 | 0.51 ± 0.153 | 0.49 ± 0.109 | 0.55 ± 0.063 | 0.57 ± 0.057 |
| C18:2*c*9,*t*12 | 0.40 ± 0.100 | 0.56 ± 0.082 | 0.53 ± 0.036 | 0.56 ± 0.118 | 0.49 ± 0.104 | 0.54 ± 0.170 | 0.49 ± 0.098 | 0.55 ± 0.081 | 0.57 ± 0.052 |
| C18:2*t*9,*c*12 | 0.20 ± 0.032 | 0.19 ± 0.018 | 0.18 ± 0.029 | 0.19 ± 0.060 | 0.16 ± 0.065 | 0.20 ± 0.063 | 0.17 ± 0.017 | 0.20 ± 0.036 | 0.21 ± 0.041 |
| C18:2 n-6 | $2.89 \pm 0.527^{a}$ | $2.67 \pm 0.135^{a}{}_{x}$ | $2.47 \pm 0.290^{b,a}{}_{\mathbf{x}}$ | $2.89 \pm 0.180^{\mathbf{a}}$ | $2.64 \pm 0.265^{\mathbf{a}}{}_{x}$ | $2.73 \pm 0.244^{\mathbf{a}}{}_{\mathbf{y}}$ | $2.60 \pm 0.179^{a}$ | $2.69 \pm 0.140^{a}{}_{x}$ | $2.71 \pm 0.131^{a}{}_{\mathbf{x,y}}$ |
| C18:2 CLA | 0.91 ± 0.130 | 0.99 ± 0.127 | 0.90 ± 0.083 | 0.97 ± 0.088 | 0.88 ± 0.098 | 0.93 ± 0.137 | 1.02 ± 0.108 | 1.07 ± 0.140 | 1,15 ± 0.085 |
| C18:3 n-3 | $0.48 \pm 0.311^{a}$ | $0.77 \pm 0.144^{b}{}_{x}$ | $0.74 \pm 0.075^{b}{}_{\mathbf{x}}$ | $0.70 \pm 0.120^{\mathbf{a}}$ | $0.64 \pm 0.125^{\mathbf{a}}{}_{y}$ | $0.69 \pm 0.159^{\mathbf{a}}{}_{\mathbf{x}}$ | $0.63 \pm 0.100^{a}$ | $0.72 \pm 0.044^{b}{}_{x,y}$ | $0.73 \pm 0.049^{b}{}_{\mathbf{x}}$ |
| C20 | 0.35 ± 0.175 | 0.26 ± 0.095 | 0.24 ± 0.046 | 0.26 ± 0.030 | 0.34 ± 0.043 | 0.24 ± 0.035 | 0.30 ± 0.028 | 0.32 ± 0.034 | 0.32 ± 0.027 |
| C20:1 *c*9 | 0.05 ± 0.030 | 0.04 ± 0.027 | 0.02 ± 0.024 | 0.04 ± 0.014 | 0.05 ± 0.083 | 0.03 ± 0.016 | 0.03 ± 0.019 | 0.04 ± 0.018 | 0.05 ± 0.008 |

Comparison between milk and cheeses: means within a row with different superscript letters are significantly different ($P < 0.05$)
Comparison between the three types of cheese with minimum ripening time (regular font style) and with extended ripening time (bold font style): means within a row with different subscript letters are significantly different ($P < 0.05$)

[1] Partial co-elution of *trans*-9 isomer with minor amounts of *trans*-11 isomer. Values presented refer to the sum of both isomers.